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HEADQUARTERS, U.S. ARMY FIELD ARTILLERY CENTER AND FORT SILL  
Fort Sill, Oklahoma 73503-5100

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Petroleum Management  
PETROLEUM PRODUCTS SUPPLY AND MANAGEMENT

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\*This pamphlet supersedes USAFACFS Pam 703-2, 3 Aug 89.

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Chapter 1

GENERAL

1-1. PURPOSE. This pamphlet provides procedures and information for the management of petroleum products used at this installation. Information/procedures have been extracted from various publications governing petroleum management.

1-2. SCOPE. This pamphlet concerns petroleum operations at the installation organizational level; procedures are applicable to active Army organizations, activities and Army owned equipment operated by contractor personnel.

1-3. COMMAND CONTROL. Commanders having the responsibility to receive, store, issue, or consume Government owned mobility fuels and related petroleum packaged products are required to develop and implement standing operating procedures necessary to achieve maximum efficiency, economy, security, accountability, and safe handling of these products.

1-4. TOOL/EQUIPMENT REQUIREMENTS. Tools/equipment required to perform the tasks described in this pamphlet should be available at organizational level. Authorization for these items is prescribed in TOE, MTOE, TDA, and CTA.

1-5. REFERENCES. To provide commanders and petroleum handling personnel with the necessary guidance for the control of petroleum and petroleum related packaged products, the following publications should be available at the applicable organization:

- a AR 11-27, Army Energy Program
- b AR 190-51, Security of Army Property at Unit and Installation Level
- AR 200-1, Environmental Protection and Enhancement
- d AR 420-49, Heating, Energy Selection, and Fuel Storage, Distribution, and Dispensing Systems
- e AR 710-2, Supply Policy Below the Wholesale Level (Regulation is part of Unit Supply Update)
- f AR 735-5, Policy and Procedures for Property Accountability (Regulation is part of Unit Supply Update)
- g DA Pamphlet 710-2-1, Using Unit Supply System (Regulation is part of Unit Supply Update)
- h DA Pamphlet 710-2-2, Supply Support Activity Supply System (Regulation is part of Unit Supply Update)
- FM 10-18, Petroleum Terminal and Pipeline Operations
- FM 10-20, Organizational Maintenance of Military Petroleum Pipelines, Tanks, and Related Equipment
- k FM 10-68, Aircraft Refueling (Aviation units only).
- l FM 10-69, Petroleum Supply Point Equipment and Operations.
- m FM 10-71, Petroleum Tank Vehicle Operations (Units authorized petroleum, oil and lubricants (POL) tank truck).
- TM 5-678, Repairs and Utilities (POL) (Units authorized bulk fuel storage tanks)
- o TM 5-4930-230-13, Operator's Organizational and Direct Support Maintenance Manual for Tank and Pump unit, Liquid Dispensing for Truck Mounting (Units authorized tank and pump unit).
- MIL HDBK 200, Quality Surveillance Handbook for Fuels, Lubricants, and Related Products
- q MIL STD 161, Identification Methods for Bulk Petroleum Products Systems including Hydrocarbon Missile Fuels (Units authorized bulk fuel storage tanks).
- r MIL STD 457, Frequency Inspection and Cleaning of Petroleum Fuel Operating and Storage Tanks (Units authorized bulk fuel storage tanks).

USAFACFS Reg 725-1, Requisitioning and Issue of Supplies and Equipment. SUPPLY PROCEDURES

Chapter 2

REQUESTING, RECEIVING, AND ISSUING BULK FUELS

2-1. REQUESTING PROCEDURES. Organizations that have established a petroleum fuel account with the DOL Supply Support Activity, must prepare a DA Form 2765-1 (Request for Issue and turn-in) for the type of fuel required. Submission of this request is as follows:

- a Request for fuel delivery to POL storage tanks will be brought to the POL issuing point, Building 2330
- b. Request for issue into cans or tank trucks of MOGAS, DIESEL FUEL, or JET FUEL, will be brought to the POL issuing point, Building 2330.

RECEIVING PROCEDURES FOR TANK TRUCK DELIVERY

- a. The Supply Support Activity (SSA) POL will arrange with the receiving organization for time and date of delivery.
- b. A qualified individual, delegated on DD Form 577 (Signature Card) (figure 2-1), will verify the fuel being delivered for type, grade and quantity prior to signing receipt document.
- c. Gage the receiving tank to ensure the storage tank will hold the amount of fuel being delivered
- d. Have a serviceable fire extinguisher, minimum 10 pound capacity (BC rating), at unloading site
- e. Inspect compartment seals. Each inlet and outlet must be sealed, and the numbers must correspond with the numbers shown on the receiving document. Check the tank compartment to ensure that it is full to the marker and fuel is the proper type.
- f. Refuse the delivery if the seal numbers do not agree
- f. Connect the grounding wire to the tank truck
- g. Ensure the driver connects the dispensing hose to the appropriate tank. Driver and receiving individual are required to stand by the truck during unloading.
- h. Halt fuel dispensing operations until unloading is completed.
- i. When delivery truck is empty, check the tank compartment to ensure no fuel remains in the truck. Sign the receiving document and release the truck.
- j. Gage the receiving tank, record the gage reading, document number of the receiving document, and amount received on DA Form 3643 (Daily Issues of Petroleum Products) (figure 2-2).

2-3 RECEIVING PROCEDURES FOR A REFUELING TRUCK

- a. Prior to arrival at issue point (Building 2330), perform operational and safety checks as shown in FM 10-71, table 8-2.
- b. Person delegated on DD Form 577 to receive POL products must be trained in safe and proper handling procedures. This person will accompany the tank truck to the POL issuing point.
- c. Upon arrival at the issuing point, present the request for fuel (DA Form 2765-1) to the POL attendant.
- d. POL point attendant will position the tank truck at the proper fill stand, inspect the tank truck for cleanliness and for leaks; then, oversee the filling of the truck by the driver.

2-4 DAILY CLOSING OPERATIONS At the close of daily operations, perform the following actions

- a. Gage the storage tank and record the tank gage reading on DA Form 3853-1 (Innage gage Sheet) (figure 2-3). Determine the actual gallons of fuel in the tank innage table.

- b. Record the pump totalizer reading on DA Form 3643 (Daily Issues of Petroleum Products) (figures 2-2 and 2-4).
- c. Close out the DA Form 3643
- d. Lock the tank inlet and the pumps with brass padlocks. Turn off the electrical current to the pumps
- e. Assemble and turn in to the Property Book Officer all receipt and issue documents

2-5. ACCOUNTING FOR BULK FUEL.

a. Commanders are responsible for all petroleum products issued to their commands as part of basic or operational loads. Units will protect, maintain control, and provide a document audit trail.

b. Commanders are responsible to designate in writing a responsible individual to maintain control of all fuels and provide --

- (1) A record of daily issues
- (2) Monthly abstract of issues
- (3) Monthly Bulk Petroleum Accounting Summary.
- (4) Document Register to maintain the audit trail.

INSTRUCTIONS FOR COMPLETION OF DD FORM 577, SIGNATURE CARD

Cardholder's signature must appear in "SIGNATURE" block

2. Signature in "COMMANDING OFFICER" block must be that of individual designated by memorandum from battalion commander/director/contractor.

3 "TYPE DOCUMENT" block must be completed in one of the following:

- a If cardholder is authorized to process maintenance transactions only, enter "MAINT ONLY."
- b. Reverse side must show name and signature of individuals authorized to sign PD AUTHENTICATION block of DA Form 2407 (see sample below).
- c If cardholder is authorized to conduct business for POL only, enter "SUPPLY CLASS III"
- d Authorizing agent may assign multiple supply classes, i.e., "SUPPLY CLASS II, VII, IX."
- e. If cardholder is authorized to conduct business with Maintenance and Supply, enter "MAINT/SUPPLY CLASS II, III, VII, or other authorized classes."

NAME (Type or print)		GRADE	DATE
John J. Brackman		SFC	5 Dec 89
OFFICIAL ADDRESS			
Btry B, 3d Bn 18th FA (WAIR) (W44DUC)			
SIGNATURE			
<i>John J. Brackman</i>			
TYPE OF DOCUMENT OR PURPOSE FOR WHICH AUTHORIZED			
MAINT/SUPPLY CLASS II, VII, IX			
I CERTIFY THAT THE ABOVE IS THE SIGNATURE OF THE AUTHORIZED INDIVIDUAL			
NAME AND GRADE OF AUTHORIZING OFFICER, CONTRACTOR, OR HIS DESIGNEE			
PAUL D. AUBREY, LTC, FA			
SIGNATURE OF COMMANDING OFFICER OR HIS DESIGNEE			
<i>Paul D. Aubrey</i>			

DD FORM 577 REPLACES 1981 EDITION WHICH WILL BE USED UNTIL EXHAUSTED SIGNATURE CARD

PRIORITY 01-10  
AUTHENTICATORS

Signature

1LT R. R. Bradley  
MSG T. J. Dorman  
CPT A. C. Taylor  
CPL M. J. Marsh  
SPC J. A. Walsh

*R. R. Bradley*  
*T. J. Dorman*  
*A. C. Taylor*  
*M. J. Marsh*  
*J. A. Walsh*

**SAMPLE**

(Reverse side of DD Form 577)

Figure 2- Instructions for Completing DD Form 577

DAILY ISSUES OF PETROLEUM PRODUCTS							NO. OF PAGES	
For use of this form, see AF 703 1; the proponent agency is DCSLOG								
VEHICLE USA REGISTRATION NUMBER	TYPE, GRADE AND UNIT OF ISSUES FOR EACH PRODUCT ISSUED						ORGANIZATION AND ADDRESS  (Indicate Service: A, Army; AF, Air Force; N, Navy; M, Marine Corps)	SIGNATURE, GRADE
	ISSUES			RECEIPTS				
	D F 2 (GAL)	c	d	D F 2 (GAL)	f	g		
	GALLONS ON TRUCK:			375				
	METER READING AFTER RECIRCULATION:						10048	
R154-4002				948				
NE0042	70						BTRY B	Jim Jones E5
NP0003	75						BTRY B	Mike Nam E4
	CLOSING METER READING:						10193	
	GALLONS ON TRUCK:			1178				
							Closed	Sp4 James Lett
NOTE: TANKS EQUIPPED WITH GAGE STICKS SHOULD BE GAGED AS SHOWN ON FIGURE 2-3								
SAMPLE								
								41
TOTAL RECEIPTS				948				
TOTAL ISSUES	145							
POST, CAMP OR STATION				DATE		SIGNATURE OF ATTENDANT		
6th BN 39th FA				2 JUN 88		James Lett		

DA FORM 3643  
APR 85

EDITION OF 1 OCT 70 IS OBSOLETE.

GPO : 1985 O - 478-213

Figure 2-2 Sample DA Form 3643 (Daily Issue of Petroleum Products).

INNAGE GAGE SHEET (USING INNAGE TAPE AND BOB) For use of this form, see FM 10-69; the proponent agency is TRADOC.				
UNIT 527 MP Co.		DATE 2 Jun 88		TIME 1625 hrs
LOCATION FORT SILL, OK. BLDG 2702		API GRAVITY		<input type="checkbox"/> OPENING <input checked="" type="checkbox"/> CLOSING <input checked="" type="checkbox"/> INVENTORY
TANK NO. 1	NOMINAL TANK CAPACITY 5,000 gal.	PRODUCT AND GRADE DIESEL FUEL NR. 2.		
LINE NO.	PROCEDURE	LINEAL READING	VOLUMETRIC EQUIVALENT (Gallons)	
1	Tape reading (Innage)	3 FT 11 IN.	2200	
2	Bob reading (bottom sediment and water)	0	0	
3	Net volume of product, uncorrected for temperature (line 1 minus line 2)		2200	
4	Average temperature			
5	Multiplier			
6	Net quantity of product at 60° F. (U.S. gallons) (line 3 multiplied by line 5)		2200	
REMARKS (Include sample number)				
<p>1. COMPLETE THIS FORM FOR EACH TANK AND TANK TRUCK.</p> <p>2. VOLUME CORRECTING FOR TEMPERATURE FOR AMOUNTS UNDER 3500 gallons is optional.</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">SAMPLE</p>				
NAME AND GRADE OF OPERATIONS OFFICER (Print)		NAME AND GRADE OF GAGER (Print)		
		SPC JAMES BOOTH		
SIGNATURE OF OPERATIONS OFFICER		SIGNATURE OF GAGER		
		James Booth		

DA FORM 3853-1  
1 MAY 71

U.S. GOVERNMENT PRINTING OFFICE : 1985 O - 489 011

Figure 2-3. DA Form 3853-1 (Innage Gage Sheet)



Figure 2-4. Sample DA Form 3643 (Daily Issue of Petroleum Products)

Chapter 3

STORAGE OF BULK PETROLEUM

3-1. STORAGE PROCEDURES: As a minimum, the following actions will be taken for fuels in storage tanks at this installation:

a. Each inlet to a storage tank must be marked to indicate the type of fuel stored in the tank (figure 3-1).

b. Storage tanks must be checked for water each time the tank is gaged. Water finding paste, NSN 6850-00-090-1361, is available through supply sources. Remove water if found.

c. Fuel in dormant storage in excess of 1 year must be tested prior to use. Contact the SSA, DOL, for assistance.

d. The storage tank vapor/breather pipe screen must be inspected for cleanliness every 6 months. A record of this inspection must be maintained on DA Form 4177 (Utilities Inspection and Service Record) (figure 4-2).

e. Tank inlet covers or caps will be in place unless entry into the tank is required. All precautions must be taken to prevent contamination of the fuels in storage.

Fuels that show excessive sediment must be tested to ensure they continue to meet specifications

Chapter 4

MAINTENANCE OF PERMANENTLY INSTALLED  
STORAGE TANKS AND DISPENSING PUMPS

4-1 RESPONSIBILITY

- a. The using organization is responsible for preventive and minor maintenance, and to notify the facility engineer on work required above unit responsibility.
- b. The facility engineer is responsible for the maintenance requirements above operator level, and to furnish assistance to the operator in performing minor repairs.

4-2. REQUIRED MAINTENANCE/INSPECTIONS.

a. Storage Tanks.

User must check the tank for water and remove if found.

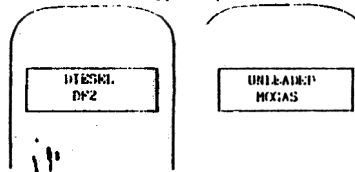
- (2) User must make a visual check of the fuel daily for excessive sediment or growth in the fuel stored. When required, a sample must be taken and submitted to USAGMPA Laboratory-West for analysis to determine if tank should be opened for inspection by the facility engineer.
- (3) User will install, or request that the facility engineer install, a permanent grounding system. User must ensure serviceability of this system daily.
- (4) Tank inlet must be permanently marked to identify fuel stored. The inlet must be capable of being secured by locking with a brass padlock.
- (5) Grass must be removed from the immediate area surrounding the tank inlet. The use of power mowers to cut grass in the immediate area of the tank inlet is prohibited.

b. Service Station Dispensing Pumps

- (1) User will properly paint and mark the pump cabinets (figure 4-1)
- (2) User will submit work request to the facility engineers to have the following action accomplished. Use DA Form 4283 (Facilities Engineering Work Request-XFA, XFB, SFC). For use of this form see AR 420-17 and DA Pam 420-6.
  - (a) Clean the line strainer, oil motor, and check the fan belt at 6 month intervals and lubricate computer head and gear assembly. POL handlers are required to record work accomplished on DA Form 4177 (Utilities Inspection and Service Record) (figure 4-2), IAW TM 5-678.
  - (b) Annually prove the meter for accuracy. Verifications of these meters will be performed by unit POL handlers using 5 gallon capacity prover can, model API 1101, IAW TB 43-180. A prover can is available at post POL point for temporary loan.

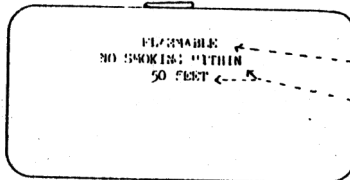
# MARKINGS

## Station Type Pumps



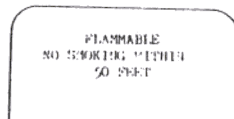
1. Dispensing pump cabinets are to be painted YELLOW.
2. WHITE letters/numbers 2 or 3 inches in size on a BLACK background. Leave a border of not less than 3/4 inch on background when applying letter/numbers.
3. Apply the same letters/numbers on the tank inlet as marked on the pump cabinets.

## 600 Gallon Fuel Pod

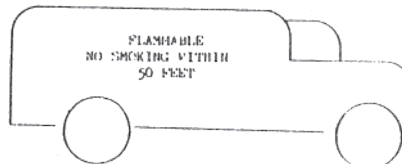


1. Mark on dome cover the type of fuel stored in the pod.
2. 6 inch letters, same color as bumper marking of the truck.
3. 3 inch letters/numbers, same color as bumper marking of the truck.
4. On dispensing end of the pod, identify type of fuel being dispensed. Pod may be marked or use a placard.

## Rear View of Tank Truck



## Side View of Tank Truck



The size and color of the markings are the same as for the 600 gallon pod shown above.

If the truck or pod is used to refuel aircraft, refer to FM 10-60 for markings required to identify fuel stored on the truck.

If the truck is equipped with a Filter Separator, the date of filter change must be marked on the top or side of the filter separator housing.

Figure 4-1. Sample of Markings

STORAGE TANK HISTORY RECORD

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EQUIPMENT NUMBER <u>11-116 NUMBER</u> DESCRIPTION <u>STORAGE TANK &amp; Pump</u>											
PREVENTIVE MAINTENANCE TO BE DONE BY <u>UNIT AND RPW</u>											
ITEM NR	WORK TO BE DONE						REFERENCE	FREQUENCY	TIME		
	PROVE METER FOR ACCURACY						TM 5-678	ANNUAL			
	CLEAN TANK BREATHER PIPE SCREEN						TM 5-678	SEMI-ANNUAL			
	CLEAN LINE STRAINER						TM 5-678	SEMI-ANNUAL			
	LUBRICATE MOTOR AND COMPRESSOR						TM 5-678	SEMI-ANNUAL			
SCHEDULE INSPECTION AND SERVICE ON THIS SIDE. RECORD INSPECTION AND SERVICE ON REVERSE SIDE.											
<div style="display: flex; justify-content: space-between;"> <div> <p><b>DA FORM 4177</b></p> <p>1 OCT 78</p> </div> <div> <p>REPLACES DA FORM 4177</p> </div> <div> <p><b>UTILITIES INSPECTION AND SERVICE RECORD</b></p> <p>For use of this form, see TM 3-600 series, the proponent agency to Office of the Chief of Engineers.</p> </div> </div>											

Figure 4-2. Sample DA Form 4177 (Utilities Inspection and Service Record)

Chapter 5

QUALITY SURVEILLANCE

5-1. FUEL SPECIFICATIONS. Petroleum products accepted from commercial suppliers are constantly tested to ensure compliance with Government specifications. The fuels and packaged products are monitored while in storage to ensure they remain at specification. When issued, it is the receivers responsibility to ensure these products continue to meet specifications until used.

5-2. CONTAMINATION. Contamination means that there is some foreign matter in the product that does not belong there. The seriousness of a contamination problem varies with the type of fuel and equipment in which it is used. Specific contaminant conditions are as follows:

a. Dirt contamination is usually some form of sand, dust or residue from worn rubber, or lint. Dirt normally gets into fuel when containers and tank compartments are not thoroughly cleaned or openings not sealed.

b. Rust and scale contamination is caused by oxidation. Tank compartments that do not have protective coatings are more likely to oxidize. Storage tanks with low inventory and not topped off are more likely to have oxidation problem than tanks that are maintained full.

c. Water appears in fuel as a cloud, haze, or emulsion. In small quantities, water can form droplets that cling to the sides of the containers. In large amounts, water can settle to the bottom and form a separate layer.

d. Microbiological growth will appear to be a grayish gelatinous matter in fuel and can easily be detected when looking at fuel in a clear container. It will usually adhere to the container in small droplets when the container is emptied. Be alert for this type of growth when checking fuel samples and from water drained from filter separators.

e. Mixed fuels type of contamination occurs when two products of different type or grades are mixed. Mixing or co-mingling of fuels can be as dangerous as any other type of contamination. In addition, mixed fuels are difficult to detect without laboratory testing.

5-3. SAMPLING AND TESTING OF FUELS. The basic references that establish standards and testing schedules for fuels are MIL HDBK 200, AR 710-2, FM 10-68, and FM 10-69. Due to varying circumstances, a simple set of procedures cannot be used for all sampling and testing situations. Minimum sampling and testing requirements and procedures are set forth below:

a. Sampling Fuel on delivery. Take a sample of fuel in a clean glass container. Hold the container to a light source to determine the color of, clarity, excessive dirt or sediment, or water in the fuel.

b. Fuel can be identified by color. The color can be used to determine the quality of the fuel. Shown below are colors and clarity of common fuels.

(1) Unleaded Gasoline Appears clear or slightly yellow Dark coloring may indicate fuel deterioration.

(2) Diesel Fuel Light amber or straw color Dark coloring may indicate fuel deterioration

(3) Jet Fuel 4. Clear or light amber NOTE: Fuel that is off color should not be put into an aircraft until properly tested.

c. Storage Tanks. Motor and aviation fuels in storage tanks that have not had fuel added within one year will not be used until properly tested.

d. Start of Daily Operations. A sample of fuel should be taken from the nozzle of the dispensing pump and examined for celerity and excessive sediment.

5-4 FILTER EFFECTIVENESS TESTING

a Prior to start of daily operations, water will be drained from filter separators

Every 30 days, test the filter for filtering effectiveness as shown below

(1) Prepare a sample tag, DA Form 1804 (Petroleum Sample) (figure 5-1) and attach to the sample can or micronic filter.

(2) Prepare the sample for shipment and ship in accordance with instructions furnished by the USAGMPA laboratory.

c. Perform the daily checks as indicated in FM 10-71, table B-2 and use Fort Sill Form 805 (Daily Inspection Checklist - POL Tank, Pump, and Truck) (figure 5-2). After all daily checks have been made recirculate approximately 100 gallons through the separator back into the tank. While circulating is being performed, operators are required to check pressure differential gage and record readings on FS Form 682 (Micronic Filter Differential Pressure - Fuel Servicing Equipment (Daily Log) (figure 5-3) in accordance with FM 10-89. Pressure differential is a daily requirement.

#### COLLECTION OF FUEL SAMPLES

a. Using the Millpore Kit, and during recirculation, take samples using plastic monitor matched weight for diesel, FSN 6630-00-764-5761. Samples are taken every 30 days to determine the effectiveness of filter/separator in operational use.

b. The preferred method for collecting samples is through the use of "quick connect adapter installed permanently in the fuel line. "Fuel filter separator outlet line." Use Adapter kit, FSN 4930-01-159-4437, TM 5-4930-230-23P. Using this adaptor permits sampling with Millpore kit.

(1) When samples taken are completed, wait 5 minutes before disassembling the Millpore kit from quick connect. This allows static electricity to discharge through the ground wire. This will prevent fires or explosions.

(2) Remove fuel from monitor using Millpore Syringe, Model No. GTP-165 DO NOT disassemble monitor or take apart because sample may be destroyed.

(3) For shipping samples to laboratory use Bag, plastic, flat polyethylene with reusable interlocking seal closure, FSN 8150-00-837-7753 (4X4") or 8105-00-837-7754 (6X6"). Place plastic monitor inside for shipping. Then prepare sample tag DA Form 1804 (Petroleum Sample) (figure 5-1), and place with monitor for identification of sample. Using Sack, shipping, FSN 8105-00-498-6619, (4X8"), (500 each) or 8105-00-290-0340 (6X10"), (250 each), ship samples to supporting laboratory:

PFO-WEST  
BLDG 247  
TRACY LOCATION  
ATTN: DDRW, PO BOX 96001  
STOCKTON, CA 95296-0960

b. Record samples taken and sent to laboratory "USAGMPA" on FS Form 377 (POL Filter/Separator Fuel Sampling) (figure 5-4). Retain this form of annual inspection by USAGMPA. If Millpore kit is not available, use 1/2 gallon steel container, FSN 8115-00-224-7935 or FSN 8115-01-192-0935 (round container). If the laboratory test indicates unsatisfactory performance of the fuel filter or separator the submitting unit/activity will be notified by telephone of the failure and advised of corrective action to take.

c. Fuel samples must be taken from a point down stream from the outlet of fuel filter separator. Samples are collected from nozzle of dispensing system, after the fuel has been recirculated. Check containers for leaks prior to mailing to laboratory.

d. Fuel filters are required to be changed every 2 years IAW FM 10-68 and DA Pam 710-2-1. Fuel filter housing must be stencilled with the date, month, and year filter is changed. Filter changes will be recorded on FS Form 682 (Micronic Filter Differential Pressure-Fuel Servicing Equipment (Daily Log)) (figure 5-3) and on DD Form 314 (Preventive Maintenance Schedule and Record) (figure 5-5).

DA FORM 1804  
1 NOV 67  
PETROLEUM SAMPLE  
(TM 10-101)

REPLACES BOTTOM OF  
1 SPEC. 42, WHICH IS  
OBSOLETE.  
USE REVERSE SIDE  
FOR REMARKS

PRODUCT

DIESEL FUEL 2

FROM (Location)  
1st BU. 11th FA. Fort Sill, OK.

SAMPLE NO.  
89-11

LABORATORY NO.

PRODUCT  
DIESEL FUEL

SPECIFICATION NO.  
FILTER

2nd PRODUCT SAMPLE  
REFERENCE  
1 GAL

FROM (Location)  
1st BU. 11th FA. Fort Sill, OK.  
MANUFACTURE/STORAGE

SOURCE  
SOURCE  
SVC 43

TRUCK NO.

TYPE NO.

OTHER (Name)

ANALYSIS BY (Name)  
DAVE STOWE

DATE LABORED  
7 JAN 89

STOCK NO.

QUALIFICATION NO.

BATCH NO.

REMARKS  
SPECIMEN FOR ANALYSIS

DATE LABORED  
7 JAN 89

STOCK NO.

QUALIFICATION NO.

BATCH NO.

TYPE SAMPLE  
COMPOSITE

TOP  
BOTTOM

ROUTINE  
SURVEILLANCE  
PROCUREMENT  
QUAL CONTROL  
OTHER

FUEL  
FUEL OIL  
FUEL OIL  
FUEL OIL  
FUEL OIL  
FUEL OIL

PROCUREMENT  
ORIGIN

OTHER

ON LINE

REVERSE SIDE

DA FORM 1804

---

NAME AND TELEPHONE NUMBER OF PERTINENT PERSON TO  
CONTACT IF ADDITIONAL INFORMATION IS NEEDED

DAVE STOWE  
DCTN 639-4444

---

STORAGE SITE ROUTINE IDENTIFIER CODE

SAMPLE

Figure 5-1. Sample DA Form 1804 (Petroleum Sample)



DAILY INSPECTION CHECKLIST - POL TANK, PUMP, AND TRUCK DATE: 7 JAN 89

1. VEHICLE: Svc 43 2. MODEL: \_\_\_\_\_

3. TYPE REFUELER: \_\_\_\_\_ 4. USA NUMBER: CA0004

5. METER READING AT START OF SHIFT IN GALLONS: 00 13 90

6. METER READING AT END OF SHIFT IN GALLONS: 00 15 65

7. PRESSURE DIFFERENTIAL IN PSI: INPUT 03, OUTPUT 07

8. WATER CHECK ( AVIATION FUEL ONLY, WITH WATER DETECTOR KIT): 0

9. GALLONS FUEL ON BOARD TANKER: 1125

10. LEFT HAND HOSE REEL.

- a. Check for leaks and worn spots: OK ☒
- b. Check reels for extension and return nozzle: OK ☒
- (1) Check for leaks: OK ☒
- (2) Check bonding wire: OK ☒
- (3) Check clip and ohms plug: OK ☒
- (4) Check nozzle screens: OK ☒

11. STATIC DISCHARGE REEL.

- a. Check cable for corrosion: OK ☒
- b. Check clip: OK ☒
- c. Check ease of reel: OK ☒

12. STORAGE BOX.

- a. Check for fire extinguisher: OK ☒
- b. Check for service of box: OK ☒

13. FILTER SEPARATOR.

- a. Check for cracks: OK ☒
- b. Drain water: OK ☒
- c. Check drain hose: OK ☒
- d. Check for leaks at valves, gauges: OK ☒

14. HOSES.

- a. Check for leaks: OK ☒
- b. Check for cracks: OK ☒
- c. Check quick disconnect: OK ☒

15. EXHAUST SPARK ARRESTOR.

- a. Check for cracks: OK ☒
- b. Check for burn out spots: OK ☒

16. RIGHT HAND HOSE. Check for leaks and worn spots: OK

17. GASOLINE CAN AND HOSE.

- a. Check for dents or damage: OK ☒
- b. Check amount of fuel: OK ☒
- c. Check hose for wear and leaks: OK ☒

FS Form 805  
(Sup Div) 1 Jan 80

SAMPLE

41

Figure 5-2. Sample FS Form 805 (Daily Inspection Checklist - POL Tank, Pump, and Truck)

DAILY INSPECTION CHECKLIST - POL TANK, PUMP, AND TRUCK (Continued)

18. MANIFOLD.  
a. Check for leaks: OK ☒  
b. Check for wear: OK ☒
19. PUMP.  
a. Check for leaks: OK ☒  
b. Check for loose bolts: OK ☒
20. ENGINE.  
a. Check oil: OK ☒  
b. Check mount bolts: OK ☒  
c. Check shroud for dents or damage: OK ☒
21. TIE DOWN.  
a. Check for loose straps: OK ☒  
b. Check for frayed straps: OK ☒
22. SWING JOINT ASSEMBLY.  
a. Check for leaks: OK ☒  
b. Check for serviceability: OK ☒  
c. Lube daily (use GCB): OK ☒
23. TURNBUCKLE. Check for loose or broken turnbuckle: OK ☒
24. TANKS.  
a. Check for leaks: OK ☒  
b. Check for scratches: OK ☒  
c. Check for dents: OK ☒  
d. Check manhole cover gasket: OK ☒  
e. Check latching mechanism: OK ☒  
f. Check for missing hardware: OK ☒  
g. Check for proper operation of valves: OK ☒  
h. Check skids for dents or wear: OK ☒  
i. Check for proper marking: OK ☒  
j. Check for water in tanks: OK ☒  
k. Check tanks for abnormal contamination: OK ☒
25. FIRE EXTINGUISHER.  
a. Check for safety pins: OK ☒  
b. Check tag and dates: OK ☒
26. TRUCK. Check steering, brakes, lights, windshields, horn, vehicle, fuel, engine oil level, radiator level, and tire pressure: OK ☒
27. Start pump engine and cycle fuel through the filter separator back into the tanks. While doing so, check tanks, filters, meter, hose reels, bowls, and nozzles for leaks. Check hoses for bulges.
28. In the event there should be a leak, seep, or spray, "STOP" take action at once.

REFERENCE: FM 10-71

*Dan Stove*  
Operator Signature

L 4672 Army Fort Sill, Okla

Figure 5-2. (cont)

Sample FS Form 682 (Equipment Daily Log)

FS Form 682  
(DOL) 1 Sep 91

[illegible]

L236 Army—Fl. Sitl. OK

**Figure 5-3. (cont)**

# POL FILTER/SEPARATOR FUEL SAMPLING

DATE	SERVICE PERFORMED	RESULTS
24 Mar 93	Sample taken and forwarded to Lab	

Sample FS Form 377 (POL Filter/Separator Fuel Sampling, Daily/Monthly Log)

FS Form 377  
(DOL) 1 Aug 91

DAILY/MONTHLY LOG

REGISTRATION NUMBER		ADMINISTRATION NO.		NOMENCLATURE												MODEL		ASSIGNED TO																																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																															
NG022				912				Truck 5 ton												M978		BTRY A 5/21																																							
JAN																																																													
FEB																																																													
MAR																																																													
APR																																																													
MAY																																																													
JUN																																																													
JUL																																																													
AUG																																																													
SEP																																																													
OCT																																																													
NOV																																																													
DEC																																																													
REMARKS																																																													
<p>Changed engine 40235 miles</p>																																																													
DATE RECEIVED		RECEIVED FROM		NOMENCLATURE												DISPOSITION		ASSIGNED TO																																											
24 MAR 93		DCL, Fort Sill, OK																																																											
REGISTRATION NUMBER		ADMINISTRATION NO.		NOMENCLATURE												MODEL		ASSIGNED TO																																											
NG022		A12		Truck, 5 ton												M978		BTRY A 5/21																																											
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22		23		24		25		26		27		28		29		30		31	

Figure 5-5. Sample DD Form 314 (Preventive Maintenance Schedule and Record)

Chapter 6

PACKAGED POL PRODUCTS

6-1. GENERAL. The care and preservation of packaged POL fuel and lubricants is an important responsibility of the POL handler and user.

6-2. SHELF LIFE OF PRODUCTS. Shelf life of products are provided in MIL HDBK 200. Containers should be inspected before being placed in storage, and periodically thereafter for shelf life expiration dates.

6-3. SHELF LIFE OF SPECIFIC PRODUCTS. All petroleum products have a specific shelf life. All such products cannot be identified within this pamphlet. Shelf life of the most common products used at this installation are as follows:

- a Lubricating Oils-----24 months
- b Greases-----24 months
- Hydraulic Fluids-----24 months
- d Brake Fluids-----24 months
- Gear Oils-----24 months

6-4 CONTROL OF SHELF LIFE PRODUCTS

a. Proper control of shelf life can be maintained by rotating stocks. Use oldest stock first. DO NOT OVERSTOCK. Inspection of packaged products is required every 90 days for shelf life expiration date. Items received in cartons will have shelf life marked on each container. DO NOT destroy products due to outdated shelf life, and DO NOT USE. Remove outdated product from stock, identify by marking as outdated, and retain pending inspection and test results (see b below).

b. The majority of packaged petroleum products have a type II expendable shelf life, which means that upon expiration, the item may be extended for use after appropriate inspection and testing action by USAGMPA. If product fails inspection or testing, it must be turned in as hazardous waste. For proper disposition contact Directorate of Environmental Quality, Building 2592.

6-5 STORAGE OF PRODUCTS

a. Except in an emergency, containers will not be stored in direct contact with the ground. Fifty-five gallon drums will be stored with bungs positioned at 9 and 3 o'clock. Drums will not be stored in an upright position unless the drum is protected from water collecting on top. Containers smaller than fifty-five gallon drums will be stored in a building that provides water protection. Security controls must be considered when storing these items.

b. When using packaged products and the entire content of the container is not used, replace the container cover to prevent contamination. Extreme caution must be taken to seal hydraulic fluid cans properly. If the can cannot be sealed to prevent any form of dust or dirt contamination, the fluid should not be used. The unused fluid in a container that is used in servicing of aircraft must be disposed of as hazardous waste.

CHAPTER 7

SAFETY

7-1. GENERAL. Personnel, whose duties require the handling of petroleum products, must read and become familiar with FM 10-18, chapter 8, and applicable installation fire regulations prior to assuming duties. This chapter provides safety information related to POL products and should be used as a ready reference.

7-2 HEALTH HAZARDS

a. Contact of petroleum products with the skin should be avoided. Should contact occur, affected area should immediately be washed with soap and water.

b. Vapors from petroleum fuels are toxic; therefore, prolonged breathing of these vapors must be prevented. When handling fuels, an individual should stand to the windward side or in a well ventilated area. Personnel should be evacuated from areas having a large or heavy concentration of vapors. Vapors from fuels are heavier than air and tend to remain close to the ground in low lying areas.

c. The concentration of vapors which can be tolerated by a person is far below that which is required to produce combustion or explosion. Even small amount of vapors, if inhaled more than short periods of time, can cause unconsciousness. Medical help must be promptly obtained for personnel effected in this manner.

d. Fuels should never be allowed to come in contact with individual's eyes or mouth. Personnel handling petroleum fuels should be required to wear a face shield during fueling and defueling operations. If contact does occur, flush the affected areas with water and seek medical help.

7-3. FUEL FLASHPOINTS. Petroleum fuels are flammable. The point at which fuels will ignite is called the flashpoint. Gasoline has a flashpoint of 100 degrees Fahrenheit or less. Diesel fuels have a flashpoint above 100 degrees Fahrenheit. Cleaning solvents have a flashpoint above 140 degrees Fahrenheit. Because of the danger of fire or explosion, every precaution must be taken when handling petroleum fuels.

7-4 FIRE PREVENTION

Tank Vehicles

(1) Properly maintain vehicles/equipment that are used to transport and dispense fuels

(2) Position the tank vehicle in the fueling area so that it is headed toward the nearest exit and away from the buildings or other obstructions. Do not allow another vehicles to block exit routes.

(3) When possible, perform operations on level ground. Always stop the equipment's engine and set vehicle's emergency brakes. If the equipment must be parked on a grade, make sure that the wheels are chocked. During aircraft fueling, wheels must be chocked.

(4) Maintain at least 25 feet between the tank vehicle and other trucks during dispensing operations. When the tank vehicle is to be parked overnight, have a clear escape route available.

(5) When opening a compartment cover on a tank vehicle, stand to the windward side of the opening. DO NOT use a metal tool or bar in an attempt to pry open the cover.

(6) DO NOT allow the nozzle to be dragged on the ground.

Keep the truck or trailer bed clean and free of spilled fuel.

(8) Always remove the fire extinguisher from the vehicle, and position it to allow for instant use.

Other Fire Prevention Actions

(1) Keep equipment and work area free of debris, spilled fuel, and oily towels or rags. covered container should be available for disposal of used rags and towels.



(2) Smoking is not allowed within 100 feet of a fixed fuel storage or dispensing site, or 50 feet when dispensing fuel from a tank vehicle. Smoking areas will be established away from the POL area and strictly enforced.

(3) Grounding wires will be properly installed and serviceable, and they will be used when fueling vehicles.

(4) Equipment engines must be turned off when receiving fuel.

(5) Clean fuel spills when they occur. Spills of five gallons or more are to be reported to the Director Environmental Quality, and followed up with a written report.

(6) Do NOT use gasoline for cleaning purposes. Dry cleaning solvent CANNOT be used to clean any type floor; use only for cleaning of tools and equipment.

(7) Fuel dispensing operations must be halted when a fire or safety hazard is observed. Dispensing of fuel must be halted if lightning is observed within five miles for aircraft refueling, and one mile for ground vehicle fueling.

(8) Individual clothing should be changed if fuel is spilled on them. Even though the clothing feels dry to the touch, they remain extremely flammable. When washing clothing, wash separate from other clothing.

Chapter 8

SECURITY

8-1. GENERAL. Petroleum fuels, especially gasoline, and certain types of motor oils are highly susceptible to theft or diversion. Commanders of units that have storage and dispensing capabilities of these products are required to develop and implement plans in accordance with governing regulations. AR 190-51 outlines security requirements that must be implemented.

8-2. SECURITY CONTROLS.

a. Personnel that are assigned duties to store, issue, and receive fuels and packaged POL products will become familiar with security requirements for these products prior to assuming assigned duties.

As a minimum, the following actions will be enforced

- (1) Access into and out of the POL area will be controlled. Only authorized personnel and vehicles will be allowed within the POL area. Privately-owned vehicles will not enter the POL area.
- (2) Inlets to storage tanks will be locked except when receiving fuel or being gaged. Dispensing pumps will be locked when not under immediate surveillance of the POL handler. Locks must conform to standard as prescribed by AR 190-51.
- (3) Fuel carrying vehicles will be parked in lighted areas of airfields and motor pools protected by guards or locked perimeter barriers.
- (4) Packaged oils, lubricants, greases, and hydraulic fluids will be secured in a locked building or a guarded area except when loaded on a vehicle used for mission accomplishment. Fifty-five gallon drums in use will have a faucet attached that has locking capability.
- (5) Empty cans and drums, except those used to control spills, will be removed from the POL area
- (6) Complete and legible entries/exits will be made when issuing fuels or oils
- (7) Daily reconciliation of recorded issues will be made by the PBO and differences closely scrutinized.
- (8) Commanders will periodically compare fuel usage versus miles driven.
- (9) A key control plan will be developed, and keys to locks used to secure the POL area and stored products will be effectively controlled.
- (10) Fuels stored in cans will be secured when not required for mission accomplishment

Chapter 9

MOBILITY FUELS CONSERVATION

9-1. **MOBILITY FUELS ALLOCATIONS.** Mobility fuel (except MOGAS) allocations are based upon two percent reduction from actual usage during previous Fiscal Year. DOL will issue allocations on an annual basis and will monitor usage on a quarterly basis. Should action become necessary to reduce consumption. PHASE RED or PHASE YELLOW described in the paragraphs 9-3 and 9-4 below, as applicable, will be announced.

9-2. **MOGAS ALLOCATIONS.** Allocations for MOGAS are based upon a five percent reduction of usage during the same fiscal quarter of the previous fiscal year. DOL will assign user allocations on a quarterly basis, and will provide actual consumption figures to customers on a monthly basis. Assigned allocations are directive in nature and will not be exceeded without prior written authorization from the Chief of Staff. Requests for permission to exceed assigned allocations must be supported by substantial impact statements routed through DOL, ATTN: ATZR-LM, to the Chief of Staff.

9-3. **GROUND MOBILITY FUELS.** When conservation efforts are required for ground mobility fuels, PHASE RED will be made either telephonically or through the use of a "Direct Fire" message. Specific portions of RED will be designated as PHASE RED 1, RED 2, RED 3, etc. The message will identify the specific fuel or fuels; i.e., MOGAS or both to be reduced. PHASE RED designations are as follows:

a. RED 1. DOL will alert activities/units of shortage. Activities will take measures in their areas to reduce of ground mobility fuels by 10 percent.

b. RED 2. Activities will reduce usage of ground mobility fuels by 10 percent

c. RED 3. Activities will reduce usage of ground mobility fuels by 20 percent

d. RED 4. Activities will reduce usage of ground mobility fuels by 30 percent

Activities will reduce usage of ground mobility fuels by 50 percent

f. RED 6. Nonessential use of ground mobility fuels will cease. Only emergency vehicles will be fueled. Activities will be prepared for complete stoppage of usage with the exception of emergency vehicles (Emergency vehicles are those vehicles designated by commanders and directors as being required to protect the health; provide security, safety, and law enforcement services; or to protect Government property. Each commander or director will identify emergency vehicles required to be fueled during PHASE RED 6 and include them in respective fuel conservation contingency plans or SOPs. Upon activation of PHASE RED 6, a list of designated vehicles will be provided to the DOL.)

9-4. **AVIATION FUELS.** When conservation efforts are required for aviation fuels, PHASE YELLOW will be called. Specific portions of YELLOW will be designated as PHASE YELLOW 1, YELLOW 2, YELLOW 3, etc., as follows

a. YELLOW 1. DOL will alert DPTM who in turn alert elements of aviation fuel shortage. Aviation activities will reduce fuel consumption.

b. YELLOW 2. Reduce usage of aviation fuels 10 percent

c. YELLOW 3. Reduce usage of aviation fuels 20 percent

d. YELLOW 4. Only essential air traffic will take place. Priority will go to activities necessary to meet readiness objectives. Aviation will prepare for cessation of air flights.

9-5. **GENERAL FUEL CONSERVATION ACTIONS** General fuel conservation actions are provided below:

a. Implement GSA bulletins and regulations relating to use of GSA vehicles to attain maximum reduction in fuel consumption.

b. Stress good vehicle maintenance and driving practices (i.e., properly tuned engines, correct tire inflation, cleaning and replacing air filters, avoiding rapid starts from intersections, and excessive use of brakes, etc.).

c. Consolidate trips, resulting in fewer vehicles/aircraft being dispatched on a daily basis. U-drive sedans should not be dispatched to less than two passengers, including the operator. Station wagons, carryalls, and minibuses should not be dispatched, whether chauffeured or self-driven, with less than five passengers.

d. Limit maximum speed of Government vehicles to 55 miles per hour unless a lower speed limit is posted. Emergency vehicles may exceed speed limits during the course of responding to fire, medical, and police emergencies.

e. Reduce administrative use of aircraft and vehicles. Motor transport officers/motor pool managers will take aggressive action, based on historical data, to reassign vehicles so that users who drive more frequently are provided the most fuel efficient vehicles.

f. Eliminate unnecessary idling of vehicle engines. The practice of starting engines to preheat or cool interiors prior to taking on passengers, regardless of rank or grade, is prohibited, not only as an energy conservation measure but as a safety measure to preclude suffocation from carbon monoxide.

g. Encourage formulation and maximum use of car pools. Supervisors will be instructed that adherence to established duty hours is essential for this vital fuel conservation technique to succeed.

h. Eliminate the practice of idling diesel engines to 'keep them warm.' This practice not only wastes fuel, it may reduce engine performance and cause premature engine wear and present a safety hazard due to suffocation from carbon monoxide.

i. Reduce or eliminate the use of military vehicles for transportation to the work site within the containment area.

j. Mow grass only if required. A good rule of thumb is to mow when grass is 3 inches high for shaded grass species (fescue or ryegrass) and 2.5 inches high for sun tolerant species (bermuda grass).

9-6. FUEL CONSERVATION ACTIONS RELATED TO TRAINING Mobility fuels conservation action pertaining to training are outlined below:

a. Reduce operational training involving aircraft, vehicles, and other fuel consuming equipment without incurring unacceptable degradation of operational readiness. Driver training road tests will be consolidated to the maximum extent possible so that a minimum of two personnel will be tested in a vehicle at a time, each taking turns. Test routes will be established to cover each type of traffic condition encountered in the local driving area twice, once on the way out and once upon return. Road tests for the Army incidental license may be waived for personnel with a valid state license from the state in which the installation is located.

b Limit weapons and equipment demonstrations to the absolute minimum required for training

Leave unit equipment on-site during field training rather than returning equipment to post each day

d. Maximum use of buses to transport personnel to training sites to eliminate use of several smaller sized vehicles.

Reduce FTX and CPX in number and scope consistent with readiness requirements

Established tight controls on the conduct of off-post training

g Modify training plans to eliminate nonessential use of motorized equipment

h. Maximize foot movement to training/administrative areas and in conduct of training/daily activities.

Make maximum use of close-in training areas

j Extend the length of required field training exercises to maximize use of equipment once in place

k. Increase use of classroom instruction/use of training aids in lieu of hands-on training with motorized equipment.

9-7. FUEL CONSERVATION ACTIONS RELATED TO AVIATION TRAINING. Fuel conservation actions concerning aviation training are shown below:

- a. Reduce annual tactical Aircrew Training Manual requirements to minimum.
- b. Reduce aviator transition training to the minimum required to meet operational requirements.
- c. Minimize turn around times during airmobile training by using the most direct route and nearest training areas.
- d. Maximize use of synthetic flight trailers and simulators.
- e. Integrate flying of nonaviation duty MOS aviators into accomplishment of operational and service missions to the maximum extent possible to accomplish CRF minimums.
- f. Accomplish tactical Aircrew Training Manual minimums of operational in conjunction with administrative and operational missions to the maximum extent possible.

Chapter 10

ASSET CONTROL OF PETROLEUM PRODUCTS

10-1. SCARCITY OF POL. The increasing scarcity of petroleum fuels and operation market prices make this commodity highly susceptible to illegal diversions and theft.

10-2. RESPONSIBILITY OF MANAGERS. Managers at every level will review current management and asset control procedures to ensure that adequate safeguards are established and that fuel inventories and consumption are closely monitored.

10-3. PROBLEMS CONCERNING CONTROL OF POL. Personnel who are responsible for control of petroleum fuels should be aware of the following specific problem areas:

a. Falsification of documents used to record issues of fuels to installations and as a basis for payment to contractors.

b. Receipt documents lost or destroyed and quantities received not posted to stock records. Accounting for allowable losses is generally not understood.

c. Vehicles illegally modified to add false bottoms, bypasses on pumping systems, secret storage compartments, and other ingenious methods to divert fuel from its intended use. The use of commercial tank trucks in support of military operations greatly compounds this problem.

d. Verification of deliveries made by unauthorized personnel or personnel who were not actually present when the vehicles were loaded.

e. Unauthorized personnel ordering and signing for fuel which was delivered to military installations by commercial contractors.

f. Reconciliations of fuels received versus fuels shipped not made and audit trails not maintained. Tank vehicle is not checked to ensure that it is empty before release.

g. Seal on valves, hatch covers, and containers not checked to ensure they are intact when received.

h. Adjustment reports, reimbursable documents, and other reports not submitted accurately or on a timely basis. Adjustment reports not prepared as required for losses exceeding allowable amounts.

i. Incorrect gauge readings entered on accounting documents or amounts estimated and in some cases omitted. The use of meters for recording quantities should be investigated wherever possible.

j. Credit card controls weak or lacking. Procedures outlined in AR 710-2 and USAFACFS Reg 700-13 must be followed.

k. Failure to monitor fuel consumption at the unit/consumer level (e.g., vehicles that reflect unusually high fuel consumption in relation to miles driven, generators that reflect high fuel consumption in relation to hours operated).

Failure to control waste oil and lubricants

m Failure to adjust volumes based on observed temperature of product

10-4. FUTURE AUDITS AND INSPECTIONS. The above specific weaknesses will be used as items of interest in future audits and inspections at Fort Sill.

APPENDIX A

POL CHECKLIST

COMMAND CONTROL

- a Does the organization have an SOP for POL Operations?
- b. Are petroleum handlers required to use the SOP during daily operations?  
Does the organization have a Key Control Plan, AR 190-51?
- d Are petroleum handlers furnished required publications?

2 STORING/RECEIVING BULK FUELS

- a. Does the organization have tank gauging equipment, and is the equipment clean and serviceable, FM 10-69?
- b. Are the storage tanks gaged prior to receiving fuel, USAFACFS Pamphlet 703-2?
- c. Are gaging tables for each storage tank available at the POL site?
- d. Are the storage tank fill spouts marked to identify fuel in the tank, MIL STD 161?  
Is a grounding system installed, and has the system been checked by the facility engineer?
- f. Are bulk fuel deliveries received using the procedures listed in USAFACFS Pamphlet 703-2?

3 ACCOUNTABILITY

- a. Are fuel issues recorded in ink on DA Form 3643 by the POL Handler, signed for by the equipment operator? Are entry errors initialed, AR 710-2?
- b. Are pump totalizer meter readings recorded daily, compared with recorded issues, and then compared with the tank inventory, AR 710-2?
- c. Are fuels accounted for by the Property Book Officer in accordance with AR 710-2, DA Pamphlet 702-2-1, and USAFACFS Pamphlet 703-2?
- d. Does the Property Book Officer perform a physical inventory the last working day of the month, and record the results of the inventory on DA Form 3853-1?
- e Are excessive losses and gains researched to determine the cause?

4 DISPENSING FACILITIES.

- a. Are spark producing devices controlled at the POL site, FM 10-69?
- b. Are 'NO SMOKING' signs posted at the entrance to the POL site to warn personnel? Is 'NO SMOKING' enforced within 100 feet of the POL site?
- c Are fire extinguishers serviceable?
- d Are personnel familiar with fire fighting procedures for petroleum fires?
- e Are dispensing pumps properly painted, correctly marked, and maintained, USAFACFS Pamphlet 703-2?
- f. Has dead grass been removed from the storage tank fill spout area?
- g. Are the storage tank fill spout dispensing pumps locked (using brass padlocks), and the electrical current turned off at close of daily operations?  
Are the meters proved for accuracy annually?  
Fuel spills cleaned up and reported as required?

5 PACKAGED POL PRODUCTS

- a. Is accountability maintained for oils, lubricants, and greases?
- b. Are the products controlled to prevent overstockage?
- c. Are the products stored to allow old stock to be issued first?
- d. Are products kept in the original carton/box until used to allow for shelf life surveillance?  
If removed from carton/box, is shelf life marked on container? Is outdated stock disposed of properly?
- e. Are empty 55 gallon drums, excess to unit needs, turned into DRMO?
- f. Are packaged products stored to protect them from the weather?
- g. Are 55 gallon drums of oils stored horizontally, and off the ground?

6 REFUELER TRUCKS

- a. Are daily pre-operational checks performed? Is a record maintained?
- b. Is the nozzle spout hand tight?
- c. Are ACQA GLO test performed?
- d. Is a filter effectiveness sample taken monthly and submitted to the USAGMPA Laboratory for analysis? Is the date changed stenciled on the filter separator?
- e. Are pressure differential readings taken and recorded?  
Are pressure gages checked for accuracy annually? Is the date checked marked on the gage?
- g. Are trucks or fuel pods marked to comply with FM 10-71 and USAFACFS Pamphlet 703-2?
- h. Are 600 gallon pods correctly mounted on the truck in compliance with the appropriate technical manual?  
Is the truck bed clean and free from fuel spills?



**APPENDIX B**

**AUTOMATED FUEL SYSTEM**

1. The key activated automated fuel system is in operation at Fort Sill. All vehicles require a fuel key to activate the pumps at the POL point (Building 2330). GSA vehicles are furnished fuel keys by GSA Unit PBO's are required to obtain fuel keys for their respective vehicles. PBO's need to submit a DA Form 2765-1 requisition (NSN: 7030-00-T98-2425) and a memorandum, with the following information, to the POL technician at Building 2330:

- a Name of unit/activity.
- b Address and phone number
- c Point of contact.
- d DODAAC.
- e. APC code or fund code.
- f Vehicle ID number.
- g Type of fuel.

2 How to operate automated fuel system.

- a Insert fuel key into fuel sentry and follow directions below:

(1) Sentry will ask for the current milage on the vehicle. Input the current milage from the odometer and press ENTER.

(2) Sentry will ask what pump is desired. Input the appropriate pump number and press ENTER

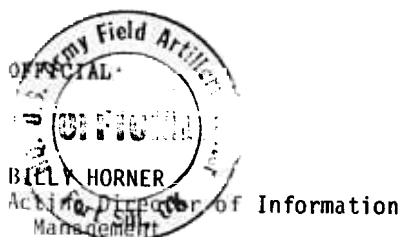
b Start pumping. NOTE: The pump will cycle off if pumping is not begun within 60 seconds.

c Return nozzle to pump when pumping is completed.

d Maintain fuel count use for input into dispatch records.

(ATZR-LOC)

FOR THE COMMANDER:



LEO J. BAXTER  
Colonel, FA  
Chief of Staff

**DISTRIBUTION:**

A  
Supply Br, MOD, DOL  
DOL (10)  
DOIM Pub Sup Sec (100)  
DOIM Records Mgt Br (2)